WHAT IS CLAIMED IS:

1. An image reading device for reading an image of an original mounted on an original mounting base by using optical scanning means which is subjected to acceleration drive along said original image mounting base until a velocity according to a reading magnification is obtained and then scanned by uniform velocity drive, the image reading device comprising:

a stepping motor which moves said optical scanning means;

reading magnification accepting means which accepts a reading magnification of an image of the original mounted on said original mounting base;

motor drive controlling means which controls drive of said stepping motor, and obliquely increases a set electric current value during acceleration drive every velocity that said optical scanning means reaches by a pulse number according to the reading magnification accepted by said reading magnification accepting means and changes the set electric current value when shifting to uniform velocity drive in accordance with the reading magnification so as to provide a characteristic for lowering the set electric current value; and

photoelectric converting means which converts a quantity of reflected light when optically scanning the original on said original mounting base by said

optical scanning means moved by said stepping motor into an electrical signal.

2. The image reading device according to claim 1, wherein said motor drive controlling means includes a memory which stores therein a pulse number according to the reading magnification accepted by said reading magnification accepting means and a set electric current value which obliquely increases an electric current during acceleration drive every velocity that said optical scanning means reaches and which is changed in accordance with the reading magnification in such a manner that a characteristic for lowering the set electric current value when shifting to uniform velocity drive is provided, in case of controlling drive of said stepping motor.

3. The image reading device according to claim 1, wherein the motor drive controlling means includes:

a memory which stores therein a pulse number according to the reading magnification accepted by said reading magnification accepting means and a set electric current value which obliquely increases an electric current during acceleration drive every velocity that said optical scanning means reaches and which is changed in accordance with the reading magnification in such a manner that a characteristic for lowering the set electric current value when shifting to uniform velocity drive is provided, in case

of controlling drive of said stepping motor;

a CPU which supplies a drive clock having a predetermined frequency and a phase current setting signal to said stepping motor; and

a motor driver which controls drive of said stepping motor based on the pulse number and the set electric current value from said memory and the drive clock having a predetermined frequency and the phase current setting signal.

4. An image reading method for reading an image of an original mounted on an original mounting base by using optical scanning means which is subjected acceleration drive along said original mounting base until a velocity according to a reading magnification is obtained by a stepping motor and then moved by uniform velocity drive, the image reading method comprising the steps:

accepting a reading magnification of an image of the original mounted on said original mounting base;

obliquely increasing a set electric current value during acceleration drive every velocity that said optical scanning means reaches by a pulse number according to the accepted reading magnification and changing the set electric current value in accordance with the reading magnification in such a manner that a characteristic for lowering the set electric current value when shifting to uniform drive is provided,

in case of driving said stepping motor; and

converting a quantity of reflected light when the original on said original mounting base is optically scanned by said optical scanning means moved by said stepping motor into an electrical signal.

5. An image reading device for reading an image of an original mounted on an original mounting base by using optical scanning means which is subjected to acceleration drive along said original mounting base until a velocity according to a reading magnification is obtained and then scanned by uniform velocity drive, said image reading device comprising:

a stepping motor which moves said optical scanning means;

reading magnification accepting means which accepts a reading magnification of the image of the original mounted on said original mounting base;

motor drive controlling means which controls drive of said stepping motor, and optimizes a set electric current value during acceleration drive every velocity that said optical scanning means reaches and a set electric current value when shifting to uniform velocity drive by a pulse number according to the reading magnification accepted by said reading magnification accepting means so as not to generate vibrations in said stepping motor; and

photoelectric converting means which converts

a quantity of reflected light when the original on said original mounting base is optically scanned by said optical scanning means moved by said stepping motor into an electrical signal.

6. The image reading device according to claim 5, wherein the motor drive controlling means includes a memory storing therein a pulse number according to the reading magnification accepted by said reading magnification accepting means, and an electric current during acceleration drive very velocity that said optical scanning means reaches and an electric current when shifting to uniform velocity drive as set electric current values optimized so as not to generate vibrations in said stepping motor, in case of controlling drive of said stepping motor.

7. The image reading device according to claim 5, wherein said motor drive controlling means includes:

a memory which stores therein a pulse number according to the reading magnification accepted by said reading magnification accepting means, and an electric current during acceleration drive very velocity that said optical scanning means reaches and an electric current when shifting to uniform velocity drive as set electric current values optimized so as not to generate vibrations in said stepping motor, in case of controlling drive of said stepping motor;

a CPU which supplies a drive clock having

a predetermined frequency and a phase current setting signal to said stepping motor; and

a motor driver which controls a drive electric current of said stepping motor based on the pulse number and the set electric current values from said memory and the drive clock having a predetermined frequency and the phase current setting values from the CPU.

8. The image reading device according to claim 5, wherein said motor drive controlling means calculates an electric current from a product of a step-out point of said stepping motor and a safety factor so that the electric current value is set every velocity that said optical scanning means reaches in order to optimize an electric current during acceleration drive every velocity that said optical scanning means reaches by the pulse number according to the reading magnification accepted by said reading magnification accepting means so as not to generate vibrations in said stepping motor, in case of controlling drive of said stepping motor.

9. The image reading device according to claim 5, wherein said motor drive controlling means has an electric current value easily obtained from electric current-torque characteristic data of said stepping motor being set in order to optimize an electric current during acceleration drive every velocity that

said optical scanning means reaches by the pulse number according to the reading magnification accepted by said reading magnification accepting means so as not to generate vibrations in said stepping motor, in case of controlling drive of said stepping motor.

10. An image reading method for reading an image of an original mounted on an original mounting base by using optical scanning means which is subjected to acceleration drive along said original mounting base until a velocity according to a reading magnification is obtained by a stepping motor and then moved by uniform velocity drive, said image reading method comprising the steps of:

accepting a reading magnification of the image of the original mounted on said original mounting base;

optimizing a set electric current value of a drive electric current of said stepping motor during acceleration drive every velocity that said optical scanning means reaches and a set electric current of the same when shifting to uniform velocity drive by a pulse number according to the accepted reading magnification so as not to generate vibrations in said stepping motor; and

converting a quantity of reflected light when the original on the original mounting base is optically scanned by said optical scanning means moved by said stepping motor into an electrical signal.